

# Product datasheet for MG202717

# Trem2 (NM\_031254) Mouse Tagged ORF Clone

### **Product data:**

#### OriGene Technologies, Inc.

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Product Type:	Expression Plasmids
Product Name:	Trem2 (NM_031254) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Trem2
Synonyms:	Trem; TREM-2; Trem2a; Trem2b; Trem2c
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG202717 representing NM_031254 Red=Cloning site Blue=ORF Green=Tags(s)
	TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCC <mark>GCGATCGC</mark> C
	ATGGGACCTCTCCACCAGTTTCTCCTGCTGCTGATCACAGCCCTGTCCCAAGCCCTCAACACCACGGTGC

ATGGGACCTCTCCACCAGTTTCTCCTGCTGCTGATCACAGCCCTGTCCCAAGCCCTCAACACCACGGTGC TGCAGGGCATGGCCGGCCAGTCCTTGAGGGTGTCATGTACTTATGACGCCTTGAAGCACTGGGGGAGACAG CAAGGCCTGGTGTCGGCAGCTGGGTGAGGAGGAGGGCCCATGCCAGCGTGTGGTGAGCACACACGGTGTGTGG CTGCTGGCCTTCCTGAAGAAGTGGAATGGGAAGCACAGTCATCGCAGATGACACCCTTGCTGGAACCGTCA CCATCACTCTGAAGAACCTCCAAGCCGGTGACGCGGGGCCTCTACCAGTGTCAGAGTCTCCGAGGCCGAGA GGCTGAGGTCCTGCAGAAAGTACTGGTGGAGGTGCTGGAGGACCCTCTAGATGACCAAGATGCTGGAGAT CTCTGGGTCCCCGAGGAAGTACTGGTGGAGGTGCTGGAGGACCCTCTAGATGACCAAGATGCTGGAGAT CTCTGGGTCCCCGAGGAGTCATCGAGTTTCGAGGTGCCCAAGTGGAACACAGCACCTCCAGGAATCAAG AGACCTCCTTCCCACCCACCTCCATTCTTCTCCTCCTGGCCTGCGTTCTCCTGAGCAAGTTTCTTGCAGC CAGCATCCTCTGGGCTGTGGCCAGGGGCAGGCAGAAGCCGGGAACACCTGTGGTCAGAGGGCTGGACTGT GGCCAAGATGCTGGGCACCAACTTCAGATCCTCACTGGACCCGGAGGTACG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence:	>MG202717 representing NM_031254 <mark>Red=</mark> Cloning site Green=Tags(s)
	MGPLHQFLLLLITALSQALNTTVLQGMAGQSLRVSCTYDALKHWGRRKAWCRQLGEEGPCQRVVSTHGVW LLAFLKKWNGSTVIADDTLAGTVTITLKNLQAGDAGLYQCQSLRGREAEVLQKVLVEVLEDPLDDQDAGD LWVPEESSSFEGAQVEHSTSRNQETSFPPTSILLLLACVLLSKFLAASILWAVARGRQKPGTPVVRGLDC GQDAGHQLQILTGPGGT
	TRTRPLE - GFP Tag - V
Chromatograms:	https://cdn.origene.com/chromatograms/ja1694_a06.zip
<b>Restriction Sites:</b>	Sgfl-Mlul
Cloning Scheme:	Cloning sites used for ORF Shuttling: Sgf1 ORF Miu 1 GCGATCGC C ATS Miu 1 ACG CGT Kozac Consensus EcoR 1 BamH   Kpn 1 RBS Sgf1 Asc 1 CTATAGGGCGGCCGGGGATCGCGGATCGGTCCGGGAGGAGATCTGCCGGCGCGCGGGCCGGGATCT Hind III Nhe i Rsr II Miu 1 Not 1 Xho 1 GFP Tag CAAGCTTAACTAGCCGACCG ACG CGT ACG CGG CCG CTC GAG AGG GAC
	T R T R P L E <u>M E S D</u> <u>Pmei Fsei</u> GAA GAA AGA GTT TAA ACGGCCGGCGGGAGCT E E R V stop

ACCN:	NM_031254
ORF Size:	681 bp
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <u>custsupport@origene.com</u> or by calling 301.340.3188 option 3 for pricing and delivery.
	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <u>More info</u>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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<b>ORIGENE</b> Trem2 (NM_031254) Mouse Tagged ORF Clone – MG202717		
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).	
Reconstitution Method:	<ol> <li>Centrifuge at 5,000xg for 5min.</li> <li>Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li> </ol>	
RefSeq:	<u>NM 031254.2, NP 112544.1</u>	
RefSeq Size:	1128 bp	
RefSeq ORF:	684 bp	
Locus ID:	83433	
UniProt ID:	<u>Q99NH8</u>	
Cytogenetics:	17 C	
Gene Summary:	The protein encoded by this gene is part of the immunoglobulin and lectin-like superfamily and functions as part of the innate immune system. This gene forms part of a cluster of genes on mouse chromosome 17 thought to be involved in innate immunity. This protein associates with the adaptor protein Dap-12 and recruits several factors, such as kinases and phospholipase C-gamma, to form a receptor signaling complex that activates myeloid cells, including dendritic cells and microglia. In humans homozygous loss-of-function mutations in	

this gene cause Nasu-Hakola disease and mutations in this gene may be risk factors to the

pathophysiological model for polycystic lipomembranous osteodysplasia with sclerosing leukoencephalopathy (Nasu-Hakola disease) and for inflammatory bowel disease. Alternative

splicing results in multiple transcript variants that encode different protein isoforms.

development of Alzheimer's disease. In mouse mutations of this gene serve as a

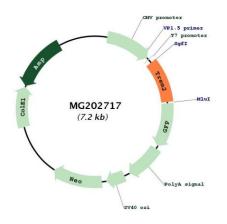
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[provided by RefSeq, Jan 2013]



## **Product images:**



Circular map for MG202717

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